UNITED STATES PATENT AND TRADEMARK OFFICE

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/934,479	08/23/2001	Yoko Fujiwara	018656-241	8426

7590	01/16/2007

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EXAMINER
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ART UNIT	PAPER NUMBER
2628	

MAIL DATE	DELIVERY MODE
01/16/2007	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

--The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

THE REPLY FILED <u>19 December 2006</u> FAILS TO PLACE THIS APPLICATION IN CONDITION FOR ALLOWANCE.

1. ☒ The reply was filed after a final rejection, but prior to or on the same day as filing a Notice of Appeal. To avoid abandonment of this application, applicant must timely file one of the following replies: (1) an amendment, affidavit, or other evidence, which places the application in condition for allowance; (2) a Notice of Appeal (with appeal fee) in compliance with 37 CFR 41.31; or (3) a Request for Continued Examination (RCE) in compliance with 37 CFR 1.114. The reply must be filed within one of the following time periods:

   a) ☒ The period for reply expires <u>3</u> months from the mailing date of the final rejection.

   b) ☐ The period for reply expires on: (1) the mailing date of this Advisory Action, or (2) the date set forth in the final rejection, whichever is later. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of the final rejection.

     Examiner Note: If box 1 is checked, check either box (a) or (b). ONLY CHECK BOX (b) WHEN THE FIRST REPLY WAS FILED WITHIN TWO MONTHS OF THE FINAL REJECTION. See MPEP 706.07(f).

Extensions of time may be obtained under 37 CFR 1.136(a). The date on which the petition under 37 CFR 1.136(a) and the appropriate extension fee have been filed is the date for purposes of determining the period of extension and the corresponding amount of the fee. The appropriate extension fee under 37 CFR 1.17(a) is calculated from: (1) the expiration date of the shortened statutory period for reply originally set in the final Office action; or (2) as set forth in (b) above, if checked. Any reply received by the Office later than three months after the mailing date of the final rejection, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

<u>NOTICE OF APPEAL</u>

2. ☐ The Notice of Appeal was filed on _____. A brief in compliance with 37 CFR 41.37 must be filed within two months of the date of filing the Notice of Appeal (37 CFR 41.37(a)), or any extension thereof (37 CFR 41.37(e)), to avoid dismissal of the appeal. Since a Notice of Appeal has been filed, any reply must be filed within the time period set forth in 37 CFR 41.37(a).

<u>AMENDMENTS</u>

3. ☐ The proposed amendment(s) filed after a final rejection, but prior to the date of filing a brief, will <u>not</u> be entered because

   (a) ☐ They raise new issues that would require further consideration and/or search (see NOTE below);

   (b) ☐ They raise the issue of new matter (see NOTE below);

   (c) ☐ They are not deemed to place the application in better form for appeal by materially reducing or simplifying the issues for appeal; and/or

   (d) ☐ They present additional claims without canceling a corresponding number of finally rejected claims.

     NOTE: _____. (See 37 CFR 1.116 and 41.33(a)).

4. ☐ The amendments are not in compliance with 37 CFR 1.121. See attached Notice of Non-Compliant Amendment (PTOL-324).

5. ☐ Applicant's reply has overcome the following rejection(s): _____.

6. ☐ Newly proposed or amended claim(s) _____ would be allowable if submitted in a separate, timely filed amendment canceling the non-allowable claim(s).

7. ☒ For purposes of appeal, the proposed amendment(s): a) ☐ will not be entered, or b) ☒ will be entered and an explanation of how the new or amended claims would be rejected is provided below or appended.

   The status of the claim(s) is (or will be) as follows:

   Claim(s) allowed: _____.

   Claim(s) objected to: _____.

   Claim(s) rejected: <u>*1-34, 37-40 and 42-47*</u>.

   Claim(s) withdrawn from consideration: _____.

<u>AFFIDAVIT OR OTHER EVIDENCE</u>

8. ☐ The affidavit or other evidence filed after a final action, but before or on the date of filing a Notice of Appeal will <u>not</u> be entered because applicant failed to provide a showing of good and sufficient reasons why the affidavit or other evidence is necessary and was not earlier presented. See 37 CFR 1.116(e).

9. ☐ The affidavit or other evidence filed after the date of filing a Notice of Appeal, but prior to the date of filing a brief, will <u>not</u> be entered because the affidavit or other evidence failed to overcome <u>all</u> rejections under appeal and/or appellant fails to provide a showing a good and sufficient reasons why it is necessary and was not earlier presented. See 37 CFR 41.33(d)(1).

10. ☐ The affidavit or other evidence is entered. An explanation of the status of the claims after entry is below or attached.

<u>REQUEST FOR RECONSIDERATION/OTHER</u>

11. ☒ The request for reconsideration has been considered but does NOT place the application in condition for allowance because: <u>see page 2.</u>

12. ☐ Note the attached Information Disclosure Statement(s). (PTO/SB/08) Paper No(s). _____.

13. ☐ Other: _____.

Jeffery A Brier
Primary Examiner
Art Unit: 2628

Response to Amendment

1.   The amendment filed on 12/19/2006 will be entered upon filing an appeal. The amendment overcomes the new matter objection to the specification, overcomes the double patenting warning concerning clams 40 and 41, and overcomes the 112 first paragraph issues in claims 1, 9, 17, 27, 32, and 33 concerning "to create a layout image in a computer for presentation of the image to a user".

Response to Arguments

2.   Applicants arguments filed on 12/19/2006 concerning the "at least one circuit for" issue and the 101 rejection have been fully considered, but, they are deemed not to be persuasive.

The arguments concerning "at least one circuit for" is not persuasive because as stated in the Final Rejection "From the claim more than one circuit will create a presentation of the image to a user, thus, creating more than one presentations to the user and the specification does not convey applicant had possession of a means that creates plural presentation for presentation to the user" since the circuits referenced by applicant form the one circuit illustrated in figure 1 that forms one presentation for the user. What is being currently claimed is something different than the circuit of figure 1 formed form plural circuits. Applicant appears to be claiming plural circuits of figure 1 that are creating plural presentations or forming pieces of a single presentation. Both of which are not conveyed by applicants specification.

At page 19 paragraph 2 to page 20 last paragraph applicant presents two arguments with regard to the 101 rejection. The first argument on page 19 last paragraph is "The claims in the present application are directed to digital image processing, which cannot be identified with a particular mathematical algorithm that "stands alone", in the context of the Stale Street Bank & Trust, Co. standards." However, this argument is not persuasive because digital image processing is a mathematical operation on digital data. The second argument on page 20 first paragraph is "Finally, even assuming that the claims do recite mathematical algorithms that stand alone in the context discussed in State Street Bank & Trust, Co., each claim recites a tangible result along the lines of the useful numerical result discussed in State Street Bank & Trust, Co.. For example, Claim 1 recites a layout means for laying out character code data corresponding to character code that is generated by a generating means within at least one reconstructed document block to create a layout image." However, this argument is not persuasive because a "layout image" is not a tangible and useful result. The claimed "layout image" is a result whose function and use is undefined and additionally the specification does not define "layout image" which gives the claimed "layout image" a broad and abstract meaning. The claimed "layout image" is abstract entities unlike the anti-aliased pixel illumination intensity data to be displayed on a display means of In re Alappat, 31 USPQ2d 1545, 1555, 1557 (Fed. Cir. 1994) and unlike the dollar amounts of State Street Bank & Trust Co. v. Signature Financial Group Inc., 47 USPQ2d 1596, 1601 (Fed. Cir. 1998) and unlike the condition of a patient's heart of Arrhythmia Research Technology Inc. v. Corazonix Corp., 22 USPQ2d 1033

(Fed. Cir. 1992). Alappat discussed claim 15 at page 1555 and discussed their

rationale at page 1557. State Street discussed the dollar amounts rationale at page

1601.

Alappat's claim 15 discussion:

> When independent claim 15 is construed in accordance with Section 112 Para. 6, claim 15 reads as follows, the subject matter in brackets representing the structure which Alappat discloses in his specification as corresponding to the respective means language recited in the claims:
> A rasterizer [a "machine"] for converting vector list data representing sample magnitudes of an input waveform into anti- aliased pixel illumination intensity data to be displayed on a display means comprising:
> (a) [an arithmetic logic circuit configured to perform an absolute value function, or an equivalent thereof] for determining the vertical distance between the endpoints of each of the vectors in the data list;
> (b) [an arithmetic logic circuit configured to perform an absolute value function, or an equivalent thereof] for determining the elevation of a row of pixels that is spanned by the vector;
> (c) [a pair of barrel shifters , or equivalents thereof] for normalizing the vertical distance and elevation; and
> (d) [a read only memory (ROM) containing illumination intensity data, or an equivalent thereof] for outputting illumination intensity data as a predetermined function of the normalized vertical distance and elevation.

Alappat's rationale discussion at page 1557:

> (b)
> Given the foregoing, the proper inquiry in dealing with the so called mathematical subject matter exception to Section 101 alleged herein is to see whether the claimed subject matter as a whole is a disembodied mathematical concept, whether categorized as a mathematical formula, mathematical equation, mathematical algorithm, or the like, which in essence represents nothing more than a "law of nature," "natural phenomenon," or "abstract idea." If so, Diehr precludes the patenting of that subject matter. That is not the case here. Although many, or arguably even all, [22] of the means elements recited in claim 15 represent circuitry elements that perform mathematical calculations, which is essentially true of all digital electrical circuits, the claimed invention as a whole is directed to a combination of interrelated elements which combine to form a machine for converting discrete waveform data samples into anti-aliased pixel illumination intensity data to be displayed on a display means. [23] This is not a

disembodied mathematical concept which may be characterized as an "abstract idea," but rather a specific machine to produce a useful, concrete, and tangible result.

State Street's rationale discussion at page 1601:

> Today, we hold that the transformation of data, representing discrete dollar amounts, by a machine through a series of mathematical calculations into a final share price, constitutes a practical application of a mathematical algorithm, formula, or calculation, because it produces "a useful, concrete and tangible result"--a final share price momentarily fixed for recording and reporting purposes and even accepted and relied upon by regulatory authorities and in subsequent trades.

Thus, in this application claiming "layout image" claims abstract entities which are not a useful, concrete, and tangible result.

3.   During the telephone interview held on 12/01/2006 the Kurosawa reference was discussed with regards to the claims. In view of the paragraph 8 of the Final Rejection the following rejection will be applied to the claims when the claims are entered by way of appeal or RCE.

4.   The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

5.   Upon the filing of an appeal or RCE amended claims 1-34, 37-40, and 42-47 will

be rejected under 35 USC 102(e) as being anticipated upon Kurosawa US Patent No.

6,466,954, made of record in the office action mailed on 7/15/2003.

        Applicant should consider the Kurosawa reference and amend the claims.

        An analysis of the claims and Kurosawa follows.

Claims 1, 9, 17, 27, 32, and 33:

Claim 1 will be used as an example:

1.   Kurosawa teaches a digital image processing device comprising:

        extraction means for extracting at least one document block that is digital

image data representing a portion of a scanned document (*Image input section 10.*), the

scanned document having document images and a background (*See column 3 lines 11-

22.*), the at least one document block includes document image data (*paragraphs,

words, figures such as a photograph figure or a handwritten figure.*) and background

image data (*unwanted paragraphs, words, and figures as well as character line space

and space between blocks, see figures 4 and 11, and column 11 line 19 discusses

background content.*), the document image data represents some of the document

images on the scanned document, wherein all the document image data in the

extracted at least one document block represents fewer document images than all the

document images that are present on the scanned document (*Column 11 lines 13-21

states: The above editing operation is not limited to the moving blocks. Each editing

operation as aboved-mentioned in sections (1)-(7) is applied. This editing is executed

not only on a binary image but also on a multivalued image or a color image.*

Furthermore, if a blank space is newly generated by editing block data in the document image, an image the same as the background content may be put on the blank in order to apply for the document image including the non-white background. Thus, Kurosawa teaches when applying steps (1)-(7) the document image data represents some of the document images on the scanned document by replacing a document image with the background image.),

generating means for generating character code data for character image data within the at least one document block (*character recognition section 18, column 4 line 65 to column 5 line 14.*);

reconstruction means for reconstructing the at least one document block in a specific shape based on the extracted at least one document block (*column 5 lines 48-63, column 11 lines 1-13, and steps (1)-(7).*); and

layout means for laying out the character code data corresponding to the character code generated by the generating means within the at least one reconstructed document block to create a layout image (*modification section 24*).

The above analysis applies to claims 9, 17, 27, 32 and 33 since these claims claim the same functions found in claim 1. The "at least one circuit" limitation in claims 32 and 33 are meet at least by figure 1.

Claims 2 and 10:

Figure 11 illustrates a plurality of blocks 1-3 extracted and arranged differently into a single document.

Claims 3 and 11:

This claim does not claim any special processing concerning the headline and the body

text.

Claims 4 and 12:

See steps (2) and (5).

Claims 5 and 13:

See step (5).

Claims 6 and 14:

See layout information memory section 16, figure 3, and column 4 lines 34-64.

Claims 7 and 15:

See image display means 22 which inherently includes a printer as a display means.

Claims 8 and 16:

See image input section 10 which is described at column 4 line 17 as a scanner.

Claims 18, 21, 24, and 34:

See column 3 line 66 to column 4 line 10 which allows the user to mark the portion of

the document to be modified. Also note the marked portion of the documents can be

any marking on the document. Claim 34: This claim does not distinguish from operation input section 26 since a drawing instrument can be anything that will allow the user to mark the original document. The claim does not distinguish from an original document before scanning and a scanned original document.

Claims 19, 22, and 25:

Headlines are characters and body text are characters of a document that are analyzed by layout analysis section 14, character recognition section 18, and image processing section 20, see column 3 lines 23-39.

Claims 20, 23, and 26:

See column 3 lines 11-21 which discusses a photographic area in the scanned document.

Claims 28-31:

See figure 11.

Claims 37-40:

See column 3 line 66 to column 4 line 10 which allows the user to mark the portion of the document to be modified which indicates the documents has an area outside the are to be processed by steps (1)-(8).).
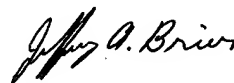
Claims 42-47:

The characters in Kurosawa have font size and these claims do not claim any type of processing being performed in response to font size. Column 6 line 38 to column 7 line 12 discusses character font and column 6 line 56 discusses character font and size.

6.   Any inquiry concerning this communication or earlier communications from the examiner should be directed to Jeffery A Brier whose telephone number is (571) 272-7656. The examiner can normally be reached on M-F from 7:00 to 3:30. If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Michael Razavi, can be reached at (571) 272-7664. The fax phone Number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

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